

Abstract

[0067] A substantially planar substrate having opposed major surfaces is provided. The substrate includes a through hole that extends between the major surfaces. The through hole is filled with a conductive interconnecting element. A conductive mounting pad and a conductive connecting pad are formed on different ones of the major surfaces in electrical contact with the conductive interconnecting element. The packaging device formed by the method has a volume that is only a few times that of the semiconductor die and can be fabricated from materials that can withstand high-temperature die attach processes. The packaging device can be configured as the only packaging device used in the semiconductor device or as a submount for a semiconductor die that requires a high-temperature die attach process.